



# RANGE DESIGN SPECIFICATIONS INCORPORATING ENVIRONMENTAL COMPLIANCE

## SUSTAINABLE ARMY LIVE-FIRE RANGE DESIGN AND MAINTENANCE (2.5.e)



Due to a significant growth in environmental regulations, Army ranges and training lands are increasingly being impacted by environmental compliance requirements that affect the use and capabilities of ranges. Existing range design elements that contribute to environmental degradation and regulatory noncompliance need to be identified and assessed, as well as the development of improved designs to mitigate future environmental degradation and potential regulatory noncompliance risk. Range design elements with respect to mission, environmental degradation and regulatory noncompliance will be analyzed.

The project develops new designs and provides retrofit and upgrade packages for selected high-risk elements. The long-term operation and maintenance requirements of existing designs and their cost implications and impact on range downtime are also assessed.

Range design specifications to address potential environmental issues resulting from site-specific conditions and proposed training use may include guidance for:

- Tank defilade positions
- Stationary and mover berm designs
- Low water crossing
- Range roads and trails design plans
- Guidance for range construction
- Guidance to mitigate environmental concerns during the range siting process
- Guidance and/or designs for mitigating dust from firing positions

### For more information

US Army Environmental Center  
Public Affairs Office  
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e-mail: [usaecpao@aec.apgea.army.mil](mailto:usaecpao@aec.apgea.army.mil)  
<http://aec.army.mil>

The designs or design elements being developed and/or implemented will be incorporated into Standard Army Designs and are available to Army installations. Technologies that have been identified and are currently being used on Army ranges will also be incorporated in the Standard Army Designs.

Existing environmental degradation and regulatory noncompliance data is captured, along with design data relative to previous work on ranges. Design elements are assessed and prioritized based on readiness requirements, common environmental degradation problems, and non-compliance risks.

Army ranges are increasingly being impacted by environmental requirements that affect the use of ranges.

Improved training area designs need to be developed to mitigate future environmental degradation and risk of regulatory noncompliance.



#### Contributing members include:

Army Training Support Center (ATSC);  
Engineering Research and Development Center (ERDC);  
US Army Environmental Center (USAEC);  
US Army Corps of Engineers Huntsville,  
US Army Engineering and Support Center;  
and Aberdeen Test Center (ATC).